

ABSTRACT OF THE DISCLOSURE

The Lane and Front-end Effectiveness Model (LFEM) is a self-contained PC desktop application that allows an analyst to quantitatively predict the impact of changes to their checkout operations. This application, according to the present invention, includes four simulation models representing the complex interactions between customers, staff, and checkstand resources. Three of these models are detailed lane models and the fourth is a store front-end checkout model. An analyst can use the LFEM to evaluate, in detail, different checkstand configurations and transaction processes and the effect these changes have on overall front-end performance. The purpose of this application is to provide retailers with timely information to reduce the risk and uncertainties of investing in new technologies or design changes by predicting their impact and return before committing resources to their acquisition or implementation.